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EXAMINER

SMITH, SHEILA B

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/681,026

Applicant(s)

LU ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-21^{are} rejected under 35 U.S.C. 103(a) as being unpatentable over Van Lieshout et al. (U.S. Patent Publication Number 2001/0036823) in view of Amirijoo et al. (U.S. Patent Publication Number 2003/0050097).

Regarding claim 1, Van Lieshout et al. discloses essentially all the claimed invention as set forth in the instant application, further Van Lieshout et al. discloses transport of radio network originated control information, in addition Van Lieshout et al. discloses a controlling radio network controller (C-RNC) for use in radio resource management (RRM) functions, the C-RNC comprising: a radio resource management function for managing radio resources, using data from a central database, including cell data and wireless transmit/receive unit (WTRU) data; said cell data including resource assignment information for a cell; and said WTRU data including WTRU capability and WTRU radio link information (which reads on paragraphs 0004-0006 and exhibited in figure 1). However Van Lieshout et al. fails to disclose using data stored in a central database.

In the same field of endeavor, Amirijoo et al. further discloses a recovery of mobile stations in connected mode upon RNC failure. In addition Amirijoo et al. discloses using data stored in a central database (which reads on paragraph 0089).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve Van Lieshout et al. with data stored in a central database as taught by Amirijoo et al. for the purpose of providing the system information about the mobile.

Regarding claims 2, Van Lieshout et al. discloses everything claimed, as applied above (see claim 1) additionally, Van Lieshout et al. discloses a cell data includes a cell record having at least one of a cell identification field; a cell status field; a timeslot record for each timeslot; a cell-based operations and maintenance configuration data field; call admission control function parameters; and a power control information field (which reads on paragraphs 0004-0006).

Regarding claims 3, Van Lieshout et al. discloses everything claimed, as applied above (see claim 1) additionally, Van Lieshout et al. discloses each timeslot record includes at least one of a timeslot number field; a channel type field; a channel direction field; a list of allocated codes; an available resource units field; and a code vector field (which reads on paragraphs 0004-0006).

Regarding claims 4, Van Lieshout et al. discloses everything claimed, as applied above (see claim 1) additionally, Van Lieshout et al. discloses the list of allocated codes includes a cell code record having at least one of a dedicated physical channel identification field; a code number field; a WTRU identification field; a radio link identification field; and a coded composite transport channel identification field (which reads on paragraphs 0004-0006).

Regarding claims 5, Van Lieshout et al. discloses everything claimed, as applied above (see claim 1) additionally, Van Lieshout et al. discloses the code vector field includes an uplink code vector record having at least one of a code identification field; a code block status field; and a code usage status field (which reads on paragraphs 0032-0036).

Regarding claims 6, Van Lieshout et al. discloses everything claimed, as applied above (see claim 1) additionally, Van Lieshout et al. discloses the code vector field includes an downlink code vector record having at least one of a code identification field; and a code usage status field (which reads on paragraphs 0032-0036).

Regarding claims 7, Van Lieshout et al. discloses everything claimed, as applied above (see claim 1) additionally, Van Lieshout et al. discloses the WTRU data includes a WTRU record having a WTRU identification field; a WTRU capability field; and a radio link information field (which reads on paragraphs 0032-0036).

Regarding claims 8, Van Lieshout et al. discloses everything claimed, as applied above (see claim 7) additionally, Van Lieshout et al. discloses the radio link information field includes at least one of a radio link record having a radio link identification field; a cell identification field; an uplink coded composite transport channel (CCTrCH) information field; and a downlink CCTrCH information field (which reads on paragraphs 0032-0036).

Regarding claims 9, Van Lieshout et al. discloses everything claimed, as applied above (see claim 8) additionally, Van Lieshout et al. discloses the uplink CCTrCH information field and said downlink CCTrCH information field include a CCTrCH record having a CCTrCH identification field; and a dedicated physical channel (DPCH) information field (which reads on paragraphs 0032-0036).

Regarding claims 10, Van Lieshout et al. discloses everything claimed, as applied above (see claim 9) additionally, Van Lieshout et al. discloses the DPCH information field includes at least one of a DPCH record having a repetition period field; a repetition length field; and a DPCH timeslot list (which reads on paragraphs 0004-0006).

Regarding claims 11, Van Lieshout et al. discloses everything claimed, as applied above (see claim 10) additionally, Van Lieshout et al. discloses the DPCH timeslot list includes at least one of a DPCH timeslot record having a timeslot number field; a midamble shift and burst type field; a transport format combination indicator presence field; and a code list (which reads on paragraphs 0004-0006).

Regarding claims 12, Van Lieshout et al. discloses everything claimed, as applied above (see claim 11) additionally, Van Lieshout et al. discloses the code list includes at least one of a WTRU code record having a DPCH identification field; a code usage status field; a CCTrCH identification field; a code number field; and a code signal to interference target field (which reads on paragraphs 0004-0006).

Regarding claim 13, Van Lieshout et al. discloses essentially all the claimed invention as set forth in the instant application, further Van Lieshout et al. discloses a method for improving the performance of radio resource management (RRM) functions in a wireless communications system, comprising the steps of: providing a data storage; storing resource allocation information for the wireless communications system in the data storage; accessing the data storage by a RRM function, wherein the RRM function obtains current resource allocation information for the wireless communications system; performing the RRM function; and updating the data storage based upon changes to the resource allocation in the wireless communications system made by the RRM function (which reads on paragraphs 0004-0006 and exhibited in figures 1-7).

Regarding claims 14, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the providing step includes providing a

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centralized data storage in a controlling radio network controller (which reads on paragraph 0017).

Regarding claims 15, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the storing step includes storing operation and maintenance data in the data storage (which reads on paragraph 0017).

Regarding claims 16, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the storing step includes storing cell-specific data in the data storage (which reads on paragraph 0017).

Regarding claims 17, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the storing step includes storing wireless transmit/receive unit-specific data in the data storage (which reads on paragraph 0017).

Regarding claims 18, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the RRM function is a call admission control routine (which reads on paragraph 0017).

Regarding claims 19, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the RRM function is an escape mechanism (which reads on paragraph 0017).

Regarding claims 20, Van Lieshout et al. discloses everything claimed, as applied above (see claim 13) additionally, Van Lieshout et al. discloses the RRM function is a background interference reduction function (which reads on paragraph 0017).

Regarding claim 21, Van Lieshout et al. discloses essentially all the claimed invention as set fourth in the instant application, further Van Lieshout et al. discloses a method for improving

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the performance of a call admission control (CAC) routine by storing commonly used data in a central database, the method comprising the steps of: initializing the central database; receiving operations and maintenance (OA&M) data; storing the OA&M data in the central database; triggering the CAC routine; retrieving cell data and wireless transmit/receive unit data from the central database, the retrieved data to be used by the CAC routine; executing the CAC routine and allocating resources to the newly admitted call; and storing information regarding the resources allocated to the newly admitted call in the central database (which reads on paragraphs 0004-0006 and exhibited in figures 1-7).

Response to Arguments

2. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Smith
June 20, 2006


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER